

CLAIMS

1. An exhaust system converter, comprising:
a catalyst;
a first endplate, positioned adjacent to a first end portion of said
5 catalyst;
a mat support, substantially covering said catalyst; and
a shell, having a diameter greater than that of the first endplate,
wherein said shell is disposed around said catalyst and said mat support, and is
disposed around and in intimate contact with at least a portion of said first
10 endplate.

2. The exhaust system converter of claim 1, wherein said first
endplate incorporates a first endplate support mechanism, and wherein said
15 first endplate support mechanism is positioned around a first annular end
portion of said catalyst.

3. The exhaust system converter of claim 2, wherein said first
20 endplate support mechanism is in the form of an annular ring.

4. The exhaust system converter of claim 3, wherein said
annular rings are welded to said endplates.
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5. The exhaust system converter of claim 3, wherein said mat
support substantially covers said catalyst and said annular ring.

6. The exhaust system converter of claim 1, further comprising a second endplate, positioned adjacent to an opposite, second end portion of said catalyst, wherein said shell is disposed around and in intimate contact with second endplate.

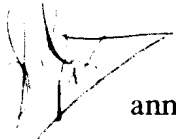
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7. The exhaust system converter of claim 6, wherein said second endplate incorporates a second endplate support mechanism, and wherein said second endplate support mechanism is positioned around a second annular end portion of said catalyst.

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8. The exhaust system converter of claim 7, wherein said second endplate support mechanism is in the form of an annular ring.

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9. The exhaust system converter of claim 3, wherein said annular rings are welded to said endplates.


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10. The exhaust system converter of claim 3, wherein said mat support substantially covers said catalyst and said annular rings.

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11. The exhaust system converter of claim 1, wherein said catalyst comprises a three-way catalyst.

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12. The exhaust system converter of claim 1, further comprising an air inlet, provided through said shell and said mat, and wherein said catalyst comprises an oxidation catalyst.

13. The exhaust system converter of claim 1, further
comprising an air inlet, provided through said first end plate, and wherein said
5 catalyst comprises an oxidation catalyst.

14. The exhaust system converter of claim 1, wherein said
first end plate has a periphery and said shell extends about halfway across said
10 periphery.

15. A method of manufacturing an exhaust system converter
comprising:
15 providing a catalyst;
providing a first endplate having a periphery and positioned
adjacent to a first end portion of said catalyst;
covering said catalyst with a mat support;
providing over said mat support and said endplate a shell,
20 having a diameter greater than that of said first endplate; and
sizing down said shell over said mat support and at least a
portion of said periphery of said first endplate.

16. The method of claim 15, wherein said first endplate
incorporates a first endplate support mechanism, and wherein said first
endplate support mechanism is positioned around a first annular end portion of
said catalyst, and further comprising covering said first endplate support
mechanism with said mat support.

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17. The method of claim 16, wherein said first endplate support mechanism is in the form of an annular ring.

5 18. The method of claim 17 further comprising welding said annular ring to said second endplate.

10 19. The method of claim 15, further comprising providing a second endplate, positioned adjacent to an opposite, second end portion of said catalyst, wherein said step of sizing down said shell includes sizing down said shell such that it is in close contact with said mat support, said first endplate, and said second endplate.

15 20. The method of claim 19, wherein said second endplate incorporates a second endplate support mechanism, wherein said second endplate support mechanism is positioned around an opposite, second annular end portion of said catalyst, and further comprising covering said second
20 endplate support mechanism with said mat support.

25 21. The method of claim 20, wherein said second endplate support mechanism is in the form of an annular ring.

22. The method of claim 21, further comprising welding said annular ring to said endplate.

